REMARKS/ARGUMENTS

Claims 1-5 were pending in the present application. The present response amends claims 1, 2, and 5, and adds new claims 6-16, leaving pending in the application claims 1-16. Reconsideration of the rejected claims and consideration of the newly presented claims is respectfully requested.

I. Objection to the Drawings

The drawings are objected to for the reasons discussed below. The changes to the Figures are not intended to alter the scope of the invention or be interpreted as a limitation on the claimed invention.

- a. Prior Art label on Figure 1 Figure 1 is objected to as failing to include a designation as Prior Art. For reasons including those of record, Applicants respectfully submit that no such designation is necessary. In order to expedite issuance of the pending claims, Applicants have labeled Fig. 1 as prior art. Applicants also have added Fig. 5 to show an elongated aperture device in accordance with the present invention. The use of an elongated aperture device in the setup of Figure 1, as well as the shaping of the beam by the elongated aperture, is described and supported in the application as filed, such as at page 2, line 30-page 3, line 7; and page 3, lines 27-29.
- b. *Means for Supporting* The drawings are objected to as failing to show "means for supporting a sample." Although Applicants respectfully submit that one of ordinary skill in the art would know how to support the sample, and that in light of the specification such supporting means would not add new matter to the specification, the non-essential language has been removed from the claims in order to expedite issuance of the pending claims.
- c. Showing of Grating Structure and Sample The drawings are objected to as failing to show the sample upon which the grating structure is "inherently" disposed upon. Applicants have amended Figure 1 to show both the sample and the grating structure. Both the sample and the grating structure are also shown in newly-presented Figure 5.
- d. Optical Means for Collecting The drawings are objected to as failing to show the "optical means for collecting the optical signature." Claims 1-5 as amended require an "optical detector" such as detector element 106 in Figures 1 and 5. As a result of the amendment, Applicants respectfully submit that no change to the Figures is required.

- e. *Processing Means* The drawings are objected to as failing to show the "processing means." As amended, claims 1-5 do not recite the non-essential "processing means." Applicants therefore respectfully submit that no change to the Figures is required.
- f. New Figure As discussed above, Figure 5 has been added to show the elongated aperture in a metrology device as described in the specification. The features shown in Fig. 5 are described in the specification as filed, and as such do not add new matter. Applicants respectfully request consideration of newly-presented Figure 5.

As Applicants have amended the Figures and/or canceled the language to which the Examiner objected, Applicants respectfully request that the objection to the Figures be withdrawn.

II. Rejection under 35 U.S.C. §112

a. §112, first paragraph

Claims 1-5 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Particularly with respect to claim 1, the recitation of "processing means" was rejected, along with the term "parameters of interest." Applicants respectfully disagree with the rejection, as a number of parameters are specifically listed in the specification (such as profile shape, critical dimension, and line with on page 1). It is not a requirement that every parameter that could be measured is listed. Methods of analyzing reflected light to determine such parameters are well known to one of ordinary skill in the art. "Processing means" for determining these parameters from reflected light also are well known to one of ordinary skill in the art. While Applicants respectfully disagree with the rejection, the claims have been amended to remove these non-essential limitations in order to expedite issuance of the pending claims.

Claims 1-5 are also rejected for failing to specify the optical means for detecting the optical signature. As amended, claims 1-5 require "an optical detector located along a reflection path for detecting the optical signature." Optical detectors for detecting reflected light in a reflectometer, for example as stated on page 1 of the specification, are well known to one of ordinary skill in the art, and would not require undue experimentation to determine how to detect the reflected light, such as having to resort to trying a "Geiger counter" as set forth by the

Examiner. As the amended claims are sufficiently definite and supported by the specification, Applicants respectfully request that the rejection with respect to claims 1-5 be withdrawn.

b. §112, second paragraph

Claims 1-5 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-5 again are rejected for reciting "a processing means" and "parameters of interest." Applicants respectfully submit that the limitations would be understood to one of ordinary skill in the art and would be sufficiently definite. As discussed above, however, claims 1-5 have been amended and no longer contain these non-essential limitations. As claims 1-5 no longer contain the language which the Examiner rejected, Applicants respectfully request that the rejection with respect to claims 1-5 be withdrawn.

III. Amendment to the Claims

Unless otherwise specified, amendments to the claims are made for purposes of clarity, and are not intended to alter the scope of the claims or limit any equivalents thereof. The amendments are supported by the specification and do not add new matter to the specification.

IV. Amendment to the Specification

The amendments to the specification are intended to describe newly-presented Figure 5. The features of Figure 5 were described elsewhere in the specification as filed, and as such should not add new matter to the specification. Applicants therefore respectfully request consideration and entry of the amendments to the specification.

IV. Newly Presented Claims

Claims 6-16 have been added to cover different aspects of the present invention. These claims are supported by the specification and do not add new matter. Applicants therefore respectfully request consideration of newly presented claims 6-16.

.. ||}

//

//

V. Conclusion

In view of the above, it is respectfully submitted that the application is now in condition for allowance. Reconsideration of the pending claims and a notice of allowance is respectfully requested.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-1703, under Order No. TWI-31500. A duplicate copy of the transmittal cover sheet attached to this Response to Office Action Mailed September 23, 2003, is provided herewith.

Respectfully submitted,

STALLMAN & POLLOCK LLP

Dated: November 20, 2003

Jason D. Lohr

Attorneys for Applicant(s)